

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

IN THE MATTER OF AN AGREED ORDER RE:

Fire Mountain Farms, Inc

AGREED ORDER No.
_____19442_____

TO: Robert Thode
Fire Mountain Farms, Inc
856 Burnt Ridge Rd
Onalaska, WA 98570

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To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email ecyadacoordinator@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877-833-6341.

I. INTRODUCTION

The mutual objective of the Washington State Department of Ecology (Ecology) and Fire Mountain Farms, Inc (Facility) under this Agreed Order (Order) is to authorize new or amended biosolids management activities from September 5, 2020, to the date upon which the Facility obtains final approval of coverage under the next Statewide General Permit for Biosolids Management. This Order is needed to authorize activities because a current permit is not in place to allow such activities. This Order requires the Facility to comply with state rules and requirements for biosolids management, payment of associated fees, and outlines consequences for non-compliance.

This Order is for the business/facility/site known as:

Fire Mountain Farms, Inc: Big Hanaford, Burnt Ridge, Homestead, Lincoln Creek and Newaukum Prairie Units ;

located at (address, legal description, parcel(s)):

Big Hanaford parcels: 023443000000, 023446002000, 023460000000, 023486000000, 023485000000, 023484000000, 023487003000, 023494000000, 023447000000, 023447001000, and 023446003000

Burnt Ridge parcels: 033243002000, 033259000000, 033243005000, 033243003000, 033243004001, 033243004002, 033243004003, and 033243004004

Homestead parcels: 033264001000 and 033407000000

Lincoln Creek parcels: 024235002000, 024256003000, 242380030000, 242590000000, 242440000000, 242450000000, 242480010010, and 24248001003

Newaukum Prairie parcels: 018125004007

II. JURISDICTION

This Order is issued pursuant to Chapter 70A.226 of the Revised Code of Washington (RCW) Municipal Sewage Sludge—Biosolids.

III. PARTIES BOUND

This Order shall apply to, and be binding upon, the Parties to this Order. The undersigned representative of each party hereby certifies that he or she is authorized to enter into this Order, and to execute and legally bind such party to comply with this Order.

IV. DEFINITIONS

For the purpose of this Order:

Facility: Refers to Fire Mountain Farms, Inc

Party/Parties: Refers to the Washington State Department of Ecology and Fire Mountain Farms, Inc

Agreed Order or Order: Refers to this Order and includes all appendices to this Order, which are integral and enforceable parts of this Order.

V. TERMS AND CONDITIONS

A. General Permit Content Adoption

Parties agree to adopt with this Order the content and all applicable requirements of the Statewide General Permit for Biosolids Management issued on August 5, 2015 (General Permit), which expired on September 4, 2020.

B. Compliance

Facility agrees to comply with Chapter 70A.226 RCW, Chapter 173-308 of the Washington Administrative Code (WAC), this Order, and the content and applicable requirements of the General Permit.

Facility agrees to comply with plans and other pertinent documents approved under this Order, including any additional or more stringent requirements Ecology requires as a condition for entering into this agreement.

Both parties acknowledge that the following plans and operating documents are incorporated as conditions of this order by reference:

Table 1: Additional Documents

| Plan or Other Document | Date and Version | Comments |
|---|------------------|-----------------|
| Additional and More Stringent Requirements | 04-01-2021 | Appendix A |
| State Environmental Policy Act (SEPA) threshold determination | 10-15-2020 | DNS, Appendix B |
| Site Specific Land Application Plan (SSLAP) – Big Hanaford | 07-23-2020 | Appendix C |
| SSLAP – Burnt Ridge | 07-23-2020 | Appendix D |
| SSLAP – Homestead | 07-23-2020 | Appendix E |
| SSLAP – Lincoln Creek | 07-23-2020 | Appendix F |
| SSLAP – Newaukum Prairie | 07-23-2020 | Appendix G |

C. State Environmental Policy Act

Ecology has determined that all requirements under Chapter 197-11 WAC, State Environmental Policy Act (SEPA) have been satisfied.

D. Public Notice

The Facility has provided public notice of its intention to initiate the activities authorized by this agreed order in the same manner as would be required for an application for new or expanded permit coverage under WAC 173-308-310.

E. Coverage under the next Statewide General Permit

Unless an extension is granted under WAC 173-308-310(4), facility agrees to submit the associated permit application and other required documentation to Ecology within 90 days of the effective date of the next Statewide General Permit for Biosolids Management,.

F. Fees

Facility has paid Ecology a facility review fee of \$2868.28 as a pre-condition of Ecology's signature of this order.

Facility agrees to pay an annual biosolids fee to Ecology according to the current permit fee schedule.

VI. ENFORCEMENT

If Facility violates any provision of this order, it is subject to enforcement pursuant to 70A.226 RCW and Chapter 173-308 WAC. Ecology may bring an action at law or in equity, including injunctive relief, to enforce this order. Willful violation of this order is a gross misdemeanor punishable by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment for up to three hundred sixty-four days, or both. In addition to any other penalty provided by law, a person who violates this chapter or rules or orders adopted or issued pursuant to it shall be subject to a penalty in an amount of up to five thousand dollars a day for each violation. Each day of violation is a separate violation. An act of commission or omission that procures, aids, or abets in the violation is considered a violation.

VII. APPEALS

Any person with standing (Appellant), other than the Facility, may appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt. “Date of receipt” is defined in RCW 43.21B.001(2). The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC.

Appellant must file the appeal and a copy of this Order with the PCHB (see addresses below) within 30 days of the date of receipt of this Order. Filing means actual receipt by the PCHB during regular business hours.

Appellant must serve a copy of the appeal and this Order on Ecology in paper form by mail, commercial parcel delivery service, or in person (see addresses below). E-mail is not accepted. Please note that Ecology offices may be closed to walk-in service due to COVID-19 outbreak, but mail and commercial parcel delivery services is still being received. Service is complete upon deposit in the United States mail properly stamped and addressed. Service by commercial parcel delivery service is regarded as complete upon delivery to the parcel delivery company with charges prepaid.

Appellant must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Figure 1: Address and Location Information

Street Addresses

Department of Ecology

Attn: Appeals Processing Desk

300 Desmond Drive SE

Lacey, WA 98503

Pollution Control Hearings Board

1111 Israel Rd SW

STE 301

Tumwater, WA 98501

Mailing Addresses

Department of Ecology

Attn: Appeals Processing Desk

PO Box 47608

Olympia, WA 98504-7608

Pollution Control Hearings Board

PO Box 40903

Olympia, WA 98504-0903

VIII.EFFECTIVE DATE

This Order shall be binding and take effect on the date it is executed and signed by the Parties. This Order shall remain in effect until Facility obtains final approval of coverage under the next General Permit.

Effective Date: April 19, 2021

Fire Mountain Farms, Inc

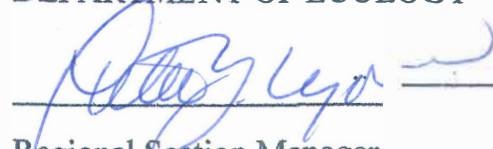


Facility Responsible Official

Date: 4/16/21 _____

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY



Regional Section Manager

Date: 4/15/21 _____

RECEIVED

APR 12 2021

WA State Department
of Ecology (SWRO)

IX. APPENDICES

See Table 1 for list of appendices. and attachments

A. Appendix A – Additional and More Stringent Requirements

Fire Mountain Farms must comply with the following requirements as a condition of Agreed Order #19442:

1. Storage

The State Environmental Policy Act (SEPA) checklist submitted by Fire Mountain Farms (FMF) in July of 2020, did not include sufficient information to evaluate long-term storage of biosolids at any of the units. Therefore, long-term storage of biosolids is not approved for any units under this order. The temporary staging of biosolids in the field or on a storage pad is allowed and must be limited to six (6) weeks while being limited to those areas described and noted in the Site Specific Land Action Plan (SSLAP) and site maps respectively. If rain is projected to occur during the time biosolids are staged in a field, the piles must be covered with a tarp or other non-permeable barrier. Unless approved by The Department of Ecology (Ecology), all temporarily staged biosolids must be land applied by October 1st of each year.

2. Late Season Application

For land application between October 1st and 31st, land application may occur with approval from Ecology based on evaluation of the run-off risk listed in the Manure Spreading Advisory (MSA), upcoming weather data, and additional supporting documentation if requested by Ecology. The MSA can be found at [Washington Nutrient Management Planning website](#).

3. Odors

Ecology will investigate all complaints regarding odor, believed to have originated from a biosolids application unit. Upon investigation, one or more of the following conditions may be required to mitigate offsite odors:

- a) No action is required; temporary staging and land application may continue.
- b) The current temporary staging location may be required to be physically covered or moved to a different location.
- c) Land application may be terminated or a modification to application practices may be required (e.g. injection of liquid biosolids or incorporation of biosolids within 6-hours of application).
- d) An odor management plan may be required to continue, with either or both, temporary staging and land application of biosolids.

4. Western Washington Biosolids Management Matrix

Biosolids application activities conducted in western Washington must be conducted in compliance with the attached Western Washington Biosolids Management Matrix. Timbered portions of sites are exempted from this requirement, but must be addressed separately as required by bullet 5 below. This requirement is to ensure compliance with Washington Administrative Code (WAC) 173-308-190.¹ It is further based on Ecology's determination that, at the western Washington sites covered by this agreed order, the potential for groundwater contamination due to biosolids application exists, and is therefore

¹ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-190>

appropriate to include to ensure compliance with the provisions of WAC 173-200² (Water Quality Standards for Groundwaters for the State of Washington). See Table 1 for additional details.

5. Timber Production

Prior to conducting application of biosolids to timber land, FMF must update its SSLAPs to include an explanation of the timber crop's agronomic need in relation to the timber's life cycle and its intended end use (consistent with the final use that might be reflected in a Forest Management Plan under the Revised Code of Washington ((RCW) 84.34).³ The updated SSLAPs must be approved by Ecology prior to conducting application of biosolids to timbered portions of a unit. This is to ensure that SSLAPs for sites that include timber meet the requirements for WAC 173-308-90003(2)⁴ and (3) to ensure compliance with WAC 173-308-190.⁵

6. Soil Sampling

FMF must conduct compliance soil sampling and analysis per the Soil Sampling and Analysis plan dated June 22, 2017. Sampling must occur in the fall annually for each field where biosolids are applied before October 1st of each year to demonstrate compliance with agronomic rate requirement. If an additional nutrient source is applied after the fall sampling, then field must also be sampled before spring application of biosolids to determine nitrate need of crops.

7. Groundwater Check

Depth to groundwater must be checked before every land application event to confirm groundwater is at least 3 feet from the ground's surface. Documentation must include the signature of employee who confirms this.

8. Spill Prevention and Response Plan

- a) A Spill Prevention and Response Plan must be approved by Ecology prior to transporting biosolids per WAC 173-308-100(2).⁶
- b) Biosolids must not be tracked onto roadways surrounding permitted properties. FMF must provide documentation to Ecology on how they plan to responsibly ensure this does not happen.

9. Holiday Restriction

Biosolids land application is prohibited on the following federal holidays: Memorial Day (observed), the Fourth of July, and Labor Day. This prohibition also includes the three days leading up to a federal holiday for a total of four consecutive days.

² <https://apps.leg.wa.gov/wac/default.aspx?cite=173-200>

³ <https://apps.leg.wa.gov/rcw/default.aspx?cite=84.34>

⁴ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-90003>

⁵ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-190>

⁶ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-100>

10. Timing Restriction

Biosolids land application is restricted to daylight hours. Application must not begin until a half hour after sunrise and must end a half hour before sunset.

11. Septage Restriction

No septage can be land applied to any fields unless it has been treated to biosolids standards as described in WAC 173-308-170⁷ and WAC 173-308-180.⁸

12. Buffers

Property boundaries, surface waters and well setbacks need to be flagged to show setback/buffer unless otherwise approved by Ecology. All surface water buffers must be increased to 50 feet per guidance from the Biosolids Management Guidelines of Washington State Publication #93-80 revised July 2000.

- a) Buffers for fields neighboring Lincoln Creek and Big Hanaford Creek are increased to 150 feet to ensure that biosolids are not removed in the rare instance of flooding during the application window.

13. Notification of Application

FMF must notify Ecology in advance of any land application event.

14. Annual Report Additions

FMF must submit to Ecology the following documents with their Annual Report:

- a) An up-to-date list of their Interested Parties List (IPL),
- b) A report summarizing the previous year's soil results, including all additional nutrient sources applied to fields, and any long term trends,
- c) Original soil data from accredited laboratory,
- d) Records demonstrating that FMF received proper notice and necessary information from each generator prior to land application (WAC 173-308-120(2), (3)).⁹

The reason for providing an IPL is so Ecology will be able to provide notice to all persons who might have standing to appeal any appealable decision pertaining to this facility. The report summarizing soil results is required to enable Ecology to evaluate FMF's compliance with the agronomic rate requirement of WAC 173-308-190(1)¹⁰ and the above requirement to follow the Western Washington Biosolids Application Management Matrix. Original soil data is required to certify no changes were made to data when summarizing the results. The requirement to provide records from each generator is to ensure compliance with the cited rule provision and the requirements of the 2015 General Permit for Biosolids Application.

⁷ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-170>

⁸ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-180>

⁹ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-120>

¹⁰ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-308-190>

15. Requirement to Self-Report Noncompliance

- a) You must report any noncompliance to Ecology within 24 hours of becoming aware. Unless waived in writing by Ecology, you must also submit a written explanation of the noncompliance within 5 days. Each written explanation must include:
 - 1. A description of the noncompliance,
 - 2. The cause of the noncompliance,
 - 3. The period of noncompliance, including exact dates and times,
 - 4. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- b) The **Biosolids Specific Guidelines for Solid Waste Management Response to Incidents of Non-compliance** will be followed to determine the appropriate response for any incident of non-compliance.

Specific Conditions

16. Big Hanaford Unit

- a) Land application of biosolids cannot begin at this unit until all delisted Emerald Kalama Chemical (EKC) waste has been removed from this location and a clean closure approval has been issued by Ecology.
- b) The application window of this unit is restricted to April 1st – October 31st, assuming appropriate weather conditions. According to the Natural Resources Conservation Service (NRCS) Soil Survey the dominant soil type of fields is Reed Silty Loam which is noted to have 'Frequent Flooding' during the month of March.
- c) Neighbor at 275 Big Hanaford Rd reported well for residence is not labeled on map. Map must be updated to include well and 100 foot buffer.
- d) Current groundwater monitoring point located on the western edge of field BH-14 has been deemed insufficient due to present hydric conditions. Groundwater monitoring point needs to be sampled in the middle of field BH-14 to confirm groundwater is at least 3 feet from the ground's surface. Map must be updated to reflect new monitoring point location.
- e) The following field is not approved for land application of biosolids because insufficient information was provided in the Site Specific Land Application Plan (SSLAP) to confirm that contamination of onsite pond will be prevented:
 - BH-10.
- f) The following fields are not approved for land application of biosolids because they do not have an applicable crop for biosolids application:
 - BH-11 and BH-20 CREP
- g) The following field is not approved for land application for biosolids because the risk of public contact is deemed too high:
 - Home site

17. Burnt Ridge Unit

- a) Fire Mountain Farms must be in compliance with Dam Safety permits for impoundments on Burnt Ridge Unit before land application of biosolids can occur.
- b) Land application of biosolids cannot begin at this unit until all delisted EKC waste has been removed from this location and a clean closure approval has been issued by Ecology.
- c) The buffer along the southern property line of fields BR-13 and BR-14 must be increased to 200 feet from the neighboring dwelling.
- d) Fields with slopes greater than 15% are required to have reduced application rates to prevent surface water contamination.
- e) Fields BR-13 and BR-14 are limited to the application of dewatered biosolids. Liquid application of biosolids on these fields is prohibited.
- f) An approved Spill Prevention and Response Plan must be followed at all times, including when transporting biosolids from the Burnt Ridge to Homestead Unit.
- g) The following field is not approved for land application of biosolids because the slope is too steep to prevent contamination of water source in ravine:
 - BRT-5
- h) The following field is not approved for land application of biosolids because insufficient information was provided in SSLAP for Ecology to determine that surface water contamination would be prevented:
 - BR-6

18. Lincoln Creek Unit

- a) The application window of this unit is restricted to April 1st – October 31st, assuming appropriate weather conditions. According to the Natural Resources Conservation Service (NRCS) Soil Survey one of the dominant soil type of fields is Reed Silty Loam which is noted to have 'Frequent Flooding' during the month of March.
- b) Fields with slopes greater than 15% are required to have reduced application rates to prevent surface water contamination.
- c) The following fields are not approved for land application of biosolids because they do not have an applicable crop for biosolids application:
 - LC1-CREP-1 and LC1-CREP-2

19. Newaukum Prairie Unit

- a) Land application of biosolids cannot begin at this unit until all delisted EKC waste has been removed from this location and a clean closure approval has been issued by Ecology.
- b) The following fields are not approved for land application of biosolids because they do not have an applicable crop for biosolids application:
 - NP-13 and NP-14.
- c) Neighbor at 331 Forest Napavine Rd E reported the two wells for the residence are not labeled on map. Map must be updated to include wells and 100 foot buffers.

20. Homestead Unit

- a) An approved Spill Prevention and Response Plan must be followed when transporting biosolids from the Burnt Ridge to Homestead Unit.

- b) Fields with slopes greater than 15% are required to have reduced application rates to prevent surface water contamination.
- c) FMF must be in compliance with Dam Safety permits for impoundments on Homestead Unit before land application of biosolids can occur.

Table 1 Western Washington Biosolids Application Management Matrix

| | |
|--|---|
| Fall Soil Test¹ <ul style="list-style-type: none"> Measure Nitrate-N in 0-12"² Ecology may also require 12-24" based on trends for fall soil test results | <ul style="list-style-type: none"> Max Application Window: Big Hanaford and Lincoln Creek: April 1 – October 15 Burnt Ridge, Homestead, and Newaukum Prairie: March 1 – October 15 No application until Manure Spreading Advisory (MSA) = Low Risk³ Agronomic rate approach to determine application rates Proposed application rate and supporting documentation must be submitted to Ecology at least 14 days in advance of anticipated application dates⁴ Submit with each Annual Report: summary of application activities per field |
| Fall Soil Nitrate Concentration | Required Actions |
| Target (≤ 15 ppm) | <ul style="list-style-type: none"> No increase in application rate or decrease in nutrient removal without Ecology consultation |
| Above Target (> 15 ppm - 30 ppm) | <ul style="list-style-type: none"> Report proposed actions to reduce residual nitrates <p>Ecology may require a reduced application rate up to 25%</p> |
| Excessively Above Target (> 30 ppm) | <ul style="list-style-type: none"> Explanatory report shall be submitted by professional consultant which includes recommended changes to application and farming practices Ecology may require a reduced application rate up to an additional 25%. <p>After three consecutive years in this bracket, stop application until fall soil nitrate returns to Target range.</p> |

1 Must occur per Oregon State University publication EM8832 Post-Harvest Soil Nitrate Testing for Manured Cropping Systems West of the Cascades.

2 Greater depth may be required if sampling is not conducted per EM8832 or there is a concern about nitrate leaching.

3 Or provide equivalent documentation of surface water runoff risk evaluation made prior to land application. The MSA can be found at the [Washington Nutrient Management Planning website](#).

4 Supporting documentation includes: location, proposed application rate including mineralization and ammonia retention, application history, crop, yield, soil and biosolids nutrient information, and other operational considerations.